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EXAMINER

WONG, LESLIE

ART UNIT PAPER NUMBER

2167

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/683,655

Applicant(s)

LARONNE ET AL.

Examiner

Leslie Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 and 77-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-36 is/are allowed.
- 6) ☒ Claim(s) 1-32, 37-46, 77, 83, and 89-100 is/are rejected.
- 7) ☒ Claim(s) 78-82 and 84-88 is/are objected to.
- 8) ☒ Claim(s) 47-76 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/06/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-46 and 77-100, drawn to searching database using medium content identifier, classified in class 707, subclass 104.
 - II. Claims 47-70, drawn to testing condition of a medium, classified in class 369, subclass 53.1.
 - III. Claims 71-76, drawn to processing of digital signal, classified in class 360, subclass 29.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I - III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, each of the respective inventions has a separate utility as in a system not having the others. See M.P.E.P. § 806.05(d).
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for the other Groups, restriction for examination purposes as indicated is proper.

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4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. A telephone call was made to Mr. Jerry Miller on January 19, 2005 to request an oral election to the above restriction requirement. An election was made with traverse of Group I, claims 1-46 and 77-100. As a result, Group II, claims 47-70 and Group III, claims 71-76, are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected.

Preliminary Amendment

7. Applicants' Preliminary Amendment, filed 01/27/2004, has been received, entered into the record, and considered.

8. The amendment corrected typographical error in the date of the priority application.

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9. The Applicant's claim to domestic priority under 35 U.S.C. §119(e), as a provisional of application serial number **60/449422**, filed on **02/21/2003**, is acknowledged.

Information Disclosure Statement

10. Applicants' Information Disclosure Statement, filed 11/06/2003, has been received, entered into the record, and considered. See attached form PTO-1449.

Claim Objections

11. Claim 27 is objected to because of the following informalities: claim 27 depends on itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-9, 11-19, 37-45, 77, 83, 89, 72, 90-91, and 93-94 are rejected under 35 U.S.C. 102(e) as being anticipated by **Springer, JR. et al.** ("Springer")(US 20040034650A1).

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Regarding claims 1, 11, and 37, **Springer** teaches an apparatus for medium content identification, comprising:

- a). a media content reader (§ 0023);
- b). a programmed processor that creates a medium identifier from at least two of a number of tracks on the medium, a distance, and a track fingerprint read by the media content reader (§s 0008, 0044, 0081);
- c). a server (Fig. 1, element 106);
- d). an interface that connects the programmed processor to the server (§ 0048); and
- e). a database of content information searched by the server using the medium identifier (§ 0009).

Regarding claims 2-5, 12-15, and 38-41, **Springer** further teaches wherein the content information comprises information relating to at least two of track fingerprint information, media information, and metadata information (§s 0024 and 0025).

Regarding claims 6-7, 16-17, and 42-43, **Springer** further teaches wherein the network interface connects the programmed processor to the server over one of an Internet, a local area network, and a wide area network (§s 0010, 0022, and 0104; Fig. 1, element 104).

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Regarding claims 8-9, 18-19, and 44-45, **Springer** further teaches wherein the medium identifier further comprises a plurality of track fingerprints (§ 0044).

Regarding claims 77, 83, 89, and 92, **Springer** further teaches a method of searching for medium content information, comprising:

- a). receiving a medium identifier comprising at least two of (§s 0008, 0044, and 0081);
 - b). a number of tracks of content on a medium (§s 0008, 0044, and 0081);
 - c). a distance calculation for the content on the medium (§s 0024 and 0025);
- and
- d). a track fingerprint for one track on the medium (§ 0009);
 - e). searching a database using the medium identifier (§ 0025);
 - f). creating a media list comprising a list of information resulting from the search (§ 0025); and
 - g). returning the search results (§ 0025).

Regarding claims 90-91 and 93-94, **Springer** further teaches wherein the search results further comprise naming the medium as "various artists" if not all tracks are by a same artist (§ 0043).

Claim Rejections - 35 USC § 103

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14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 10, 20-32, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Springer, JR. et al.** ("Springer")(US 20040034650A1) as applied to claims 1-9, 11-19, 37-45, 77, 83, 89, 72, 90-91, and 93-94 in view of **Milsted** (US6345256B1).

Regarding claims 10 and 46, **Springer** does not explicitly teach wherein the programmed processor further performs a non-commercial medium test on the medium.

Milsted, however, teaches a non-commercial medium test on the medium as processes the watermarks every time the digital content is copied or played, and manages the number of copies made in accordance with the Digital Contents Usage Conditions (col. 14, line 52 – col. 16, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Milsted's** teaching would have allowed **Springer's** to provide Rights Management in the Secure Digital Content Electronic Distribution System by unlocking only the content of authorized intermediate or End-Users that have secured a licensed and control and enforcement of content usage according to the conditions of purchases or license, such

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as permitted number of copies, number of plays, and the time interval or term the license may be valid as suggested by **Milsted** at col. 10, lines 16-29.

Regarding claims 20 and 30, **Springer** teaches method and computer readable medium storing instructions of medium content identification, comprising:

- b). if the medium content comprises non-commercial content
 - 1). extracting fingerprints for all tracks of the medium content from the medium (§ 0035);
 - 2). creating a medium identifier comprising fingerprints for all tracks of the medium content (§s 0035 and 0037); and
- c). searching a database with the medium identifier (§ 0025).
- a). **Springer** does not explicitly teach performing a non-commercial medium test.

Milsted, however, teaches performing a non-commercial medium test on the medium as processes the watermarks every time the digital content is copied or played, and manages the number of copies made in accordance with the Digital Contents Usage Conditions (col. 14, line 52 – col. 16, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Milsted's** teaching would have allowed **Springer's** to provide Rights Management in the Secure Digital Content Electronic Distribution System by unlocking only the content of authorized intermediate or End-Users that have secured a licensed and control and

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enforcement of content usage according to the conditions of purchases or license, such as permitted number of copies, number of plays, and the time interval or term the license may be valid as suggested by **Milsted** at col. 10, lines 16-29.

Regarding claims 21, 22, and 31, **Springer** further teaches the steps of:

- a). reading and calculating information related to medium content from a medium (§s 0044 and 0081); and
- b). creating a medium identifier from at least two of a number of tracks on the medium, a distance, and a track fingerprint calculated from the medium (§s 0024 and 0025).

Regarding claims 23 and 32, **Springer** further teaches displaying the search results (§ 0024).

Regarding claims 24-25, **Springer** further teaches search comprises a search in a remote database (§ 0025).

Regarding claims 26-27, **Springer** further wherein the network comprises at least one of an Internet, a local area network, and a wide area network (§ 0025).

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Regarding claims 28-29, **Springer** further wherein the database comprises multiple databases with at least two of a fingerprint database, a media database, and a metadata database (§s 0024 and 0025).

16. Claims 95-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kenner et al.** ("**Kenner**") (US005956716A) in view of **Springer, JR. et al.** ("**Springer**") (US 20040034650A1).

Regarding claims 95 and 100, **Kenner** teaches the steps of:

- a). verifying that a high-speed communication channel to a remote database exists (col. 17, lines 47-64);
- b). search a local database for content information (col. 4, lines 43-53; col. 8, line 51-55);
- c). If content information does not exists in the local database:
Searching the remote database with the medium identifier (col. 4, line 65 – col. 5, 5).

Kenner does not explicitly teach the steps of:

extracting fingerprints for all tracks of the medium content from the medium;
creating a medium identifier comprising fingerprints for all tracks of the medium content.

Springer, however, teaches the steps of:

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extracting fingerprints for all tracks of the medium content from the medium (§ 0035).

creating a medium identifier comprising fingerprints for all tracks of the medium content (§s 0035 and 0037);

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Springer's** teaching would have allowed **Kenner's** to facilitate identification of digital content by using the available means such as Table of Content (TOC), fingerprinting, watermarking and ISRC-based technologies as suggested from **Springer** at §§ 0035 and 0059.

Regarding claim 96, **Springer** further teaches wherein the medium identifier further comprises one of a distance (i.e. offsets) and a number of tracks on the medium (0035).

Regarding claim 97, **Kenner** further teaches displaying the search results (col. 8, lines 34-39).

Regarding claim 98, **Kenner** further teaches the high-speed communication channel is a network and the searching in the remote database comprises searching through the network (col. 17, lines 47-64; col. 4, line 65 – col. 5, 5).

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Regarding claim 99, **Kenner** further teaches the network comprises at least one of an Internet, a local area network, and a wide area network (Fig. 4, element 56).

Allowable Subject Matter

17. Claims 33-36 are allowed.

18. The following is an examiner's statement of reasons for allowance:

Prior art of record fails to teach a combination of elements including if the non-commercial medium test is indeterminate: requesting a search of a remote database using the medium identifier, receiving a first remote search results from the remote database; if either the medium content comprises non-commercial content or if information does not exist in the remote database: extracting fingerprints for all tracks of the medium content from the medium; creating an extended medium identifier comprising fingerprints for all tracks of the medium content; and requesting a search of a remote database using the extended medium identifier, and receiving a second remote search results from the remote database as recited in independent claims 33 and 35.

19. These features, together with the other limitations of the independent claims are novel and non-obvious over the prior art of record. The dependent claims 34 and 36 being definite, enabled by the specification, and further limiting to the independent claim, are also allowable.

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20. Claims 78-82, 84-88 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art of record fails to teach a combination of elements including the searching of the database comprises searching first for a fingerprint match, followed by searching for a distance match and then searching for a number of tracks match if the search results do not comprise a fingerprint match as recited in dependent claim 78.

Prior art of record fails to teach a combination of elements including an indication is made to the database that the medium identifier information should be added to the database when search results comprise matches for both the distance and the number of tracks when the search results do not comprise a fingerprint match as recited in dependent claim 79.

Prior art of record fails to teach a combination of elements including the searching of the database comprises searching first for a fingerprint match, followed by searching for a number of tracks match and then searching for a distance match if the search results comprise a fingerprint match as recited in dependent claim 80.

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Prior art of record fails to teach a combination of elements including the searching of the database further comprises searching for a similar distance match if the search results do not comprise a distance match as recited in dependent claim 81.

Prior art of record fails to teach a combination of elements including an indication is made to the database that the medium identifier information should be added to the database when search results comprise matches for both a similar distance and the number of tracks when the search results also comprise a fingerprint match as recited in dependent claim 82.

Prior art of record fails to teach a combination of elements including storing instructions wherein, when executed on the programmed processor, the process of the searching of the database comprises searching first for a fingerprint match followed by searching for a distance match and then searching for a number of tracks match if the search results do not comprise a fingerprint match as recited in dependent claim 84.

Prior art of record fails to teach a combination of elements including storing instructions wherein, when executed on the programmed processor, an indication is made to the database that the medium identifier information should be added to the database when search results comprise matches for both the distance and the number of tracks when the search results do not comprise a fingerprint match as recited in dependent claim 85.

Prior art of record fails to teach a combination of elements including storing instructions wherein, when executed on the programmed processor, the process of the searching of the database comprises searching first for a fingerprint match, followed by searching for a number of tracks match and then searching for a distance match if the search results comprise a fingerprint match as recited in dependent claim 86.

Prior art of record fails to teach a combination of elements including storing instructions wherein, when executed on the programmed processor, the process of the searching of the database comprises searching for a similar distance match if the search results do not comprise a distance match as recited in dependent claim 87.

Prior art of record fails to teach a combination of elements including storing instructions wherein, when executed on the programmed processor, an indication is made to the database that the medium identifier information should be added to the database when search results comprise matches for both a similar distance and the number of tracks when the search results also comprise a fingerprint match as recited in dependent claim 88.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Woodward, Mark L. (US 20030028721 A1)

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Cheng et al. (US 20040028281 A1)

Ward et al. (US 20020133499 A1)

Attias, Hagai (US 20040002935 A1)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (703) 305-3018. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Leslie Wong
Patent Examiner
Art Unit 2177

Lw
March 30, 2005